



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter
Governor

Dee C. Hansen
Executive Director

Dianne R. Nielson, Ph.D.
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

September 23, 1991

Mr. Russell Dobson
Cricket Mountain Plant Manager
Continental Lime, Incorporated
P. O. Box 966
Delta, Utah 84624

Dear Mr. Dobson:

Re: Review Cricket Mountain Quarry Plan Amendments, M/027/006, Millard County, Utah

The Division has completed its review of Continental Lime's July 8, 1991 submittal. Some questions remain regarding the plan and amendment package which will need to be addressed before final approval can be made. Each question has been formatted to follow the section of the minerals rules to which it applies. In response, please format your letter in the same fashion. Some of these comments address the site as a whole. Our review questions follow:

R613-004-102, 106 & 110 - Duration of Notice of Intention, Operation Plan and Reclamation Plan

1. The operator's current Mining and Reclamation Plan (MRP) approved in January of 1981 for 29 acres, needs to be revised, updated and consolidated. The current pending amendments are extensive enough to warrant this request. The operator should format the MRP application appropriately and include: Title Page, Table of Contents, List of Appendices, List of Tables, List of Figures, and Body of the Plan (addressing Operations, Reclamation, Surety, etc). The current MRP, which includes the original notice and several subsequent amendments, is disjointed and poorly organized (spread over ten years in the file), making it difficult to determine what activities are currently approved, and what portions of the plan have become obsolete. The MRP should be organized such that new pages can be inserted as replacements as new amendments are proposed and approved. - HWS

R613-004-105 - Maps, Drawings and Photographs

1. Some disturbed area boundaries are unclear on the maps provided. Where does the plant boundary end and the road boundary begin? Does the road from the plant to the quarry carry a variance? If this is a county road, can the operator produce documentation? Which roads are included in the operator's acreage figures? Which roads will remain after mining? Which roads will be reclaimed? - AAG
2. A Reclamation Treatments map must be provided to identify the location and extent of specific reclamation activities proposed and any areas which will not be reclaimed (must have approved variance for exemption from reclamation). The map will also be used to develop a reclamation surety estimate for the site. - AAG & HWS
3. Specific acreage must be broken down and identified based on a reclamation treatments map, i.e. roads, benches, floors, unreclaimed quarry areas, waste dumps with no topsoil vs. waste dumps with topsoil, areas where a specific topsoil depth is to be applied, areas where waste fines are to be applied, etc. - HWS & AAG

R613-004-107 - Operation Practices

1. No estimate of the amount of salvageable topsoil has been provided. No topsoil stockpile locations have been provided. Also, no estimate was provided for the areas to be disturbed by the stockpiles. This information must be incorporated into the plan. - AAG

R613-004-109 - Impact Assessment

1. The operator needs to address static slope stability on the highwalls during the operational phase and post-reclamation. - HWS
2. What, if any, air quality impacts will result from the mining operation? Has the operator applied for and/or obtained any necessary permits from the State Division of Air Quality? - HWS

R613-004-110 - Reclamation Plan

1. The operator needs to develop appropriate seed mixtures for reclaiming specific areas of the site. Seed mixtures should be incorporated into the plan now. They could be modified later based on the outcome of the test plot evaluation. The test plots have only been developed for evaluating reclamation on the limestone fines. How recently have these plots been evaluated? What is the current status of plant growth within these plots? - HWS

R613-004-111 - Reclamation Practices

1. A description of the waste material to be stripped and placed in the two dump locations is needed. Specifically, size of the material, % of fines and method by which it will be placed in the dump area is needed. - AAG
2. The operator mentions that straw mulch will be incorporated into the dump slopes where topsoil is lacking. This will likely be impractical where slopes are greater than 2h:1v, unless performed by hand. Please clarify how mulching of these slopes will be handled. - AAG
3. The majority of reclamation practices are described by referring back to the "Plan M/027/006-89, dated August 4, 1989". The Division sent a review letter to Continental Lime on this date, but no plan was submitted or approved on this date. Continental Lime must describe these reclamation practices in the narrative of the plan amendment or refer to a page within the plan document. The plan document itself needs to be updated and reformatted. This was discussed previously under section R613-004-102. - AAG & HWS
4. The plan explains that waste dump slopes will be reclaimed at the angle of repose (35°), with the installation of dozer terraces every 100 feet and dozer basins applied in between. This type of slope surface stabilizing technique will be inadequate to insure revegetation of these steep slopes. The Division will require 2h:1v slopes (minimum overall) for the waste dump areas, plus acceptable slope stabilizing techniques as warranted. - HWS

5. Reclaimed slopes for the Limestone Reject Stockpile must be 3h:1v and cannot be left at the angle of repose. - HWS
6. A new quarry area is slated for development, based on this latest amendment. The plan calls for the same highwall configuration as previously approved (steeper than 45° highwalls). Based on a new draft Division policy, highwalls steeper than 45° would not be allowed post-reclamation. However, since the operator has an existing variance and the policy is not presently effective, the Division will extend this variance to include the new quarry area. - HWS
7. How will topsoil redistribution be performed on the waste dump slopes? - HWS

R613-004-112 - Variances

1. The operator needs to list all variances granted by the Division in the new MRP document. The plan should specify which areas the variance(s) are applied to. - HWS

R613-004-113 - Surety

1. Acreage figures and specific reclamation treatments as presented by Continental Lime, are insufficient for the Division to develop a surety estimate as part of this review. This information can be provided with the re-submittal of reclamation treatment maps (refer to R613-004-105, item 2). - HWS
2. Based on preliminary acreage figures provided by Continental Lime, a 140 acre disturbance could result in a \$420,900 reclamation estimate. The current surety of \$179,000 is based on 86 acres. The \$420,900 figure is based on a statewide reclamation average of \$3,000/acre. The actual figure will depend on the level of detail and information provided in the revised MRP.

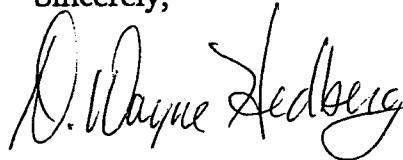
Page 5
Continental Lime, Inc.
M/027/006
September 23, 1991

R613-004-118 - Revisions

1. This plan amendment will be categorized as a revision under our Minerals definitions, since it constitutes a significant change to the operator's original notice. It will be considered for approval in the same manner as the original Notice of Intention. This will require public notice and formal Board Approval of the amount and form of revised reclamation surety. Public notice requires a 30-day waiting period after tentative approval has been granted by the Division. Final approval is accomplished once the public notice period has expired and the Board of Oil, Gas and Mining has approved of the operator's surety. - HWS

Thank you for your continued diligence and support in completing this permitting process. Please contact me, Holland Shepherd or Tony Gallegos should you have questions regarding this review.

Sincerely,



D. Wayne Hedberg
Permit Supervisor
Minerals Regulatory Program

jb

cc: David Henderson, BLM, Warm Springs Resource Area
Lowell Braxton, DOGM

M027006.1